

**REMARKS**

The above-referenced patent application has been reviewed in light of the Office Action, mailed **October 27, 2006** ("the Action"). In the Action, claims 1-3, 9, 10, 12 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Wall et al (U.S. Patent 6,526,768 – "Wall"), by Oh et al. (U.S. Pub. 2002/0066283 – "Oh") and by Hsiao (U.S. Patent 6,324,058 – "Hsiao"). Claims 1-6 and 9-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Macias et al. (U.S. Pub. 2001/008071 – "Macias") and claims 1-18 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ellsworth et al. (U.S. Patent 6,970,355 – "Ellsworth") and by Hood et al. (U.S. Patent 6,837,063 – "Hood"). Claims 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over any one of Macias, Ellsworth, Hood, Oh or Wall in view of Fang (U.S. Pub. 2002/0183032 – "Fang").

**Current Status of Claims:**

With this amendment, claims 1-8, 15, 16 and 18 remain pending. Also, with this amendment, claims 1, 2, 4, 6-8, 15, 16 and 18 are amended and claims 9-14, 17, 19 and 20 are canceled. No new matter has been introduced.

**35 U.S.C. § 102 Rejections:**

Claim 1, as currently amended, is cited as follows:

"An apparatus comprising:  
a refrigerator to absorb heat generated by a heat generating unit for a mobile computing device, the refrigerator to include a cold reservoir and a hot reservoir, the cold reservoir to be in thermal contact with a working fluid loop, a fluid of the working fluid loop being in thermal contact with the heat generating unit, wherein a pump of the working fluid loop is powered off in response to the mobile computing device receiving power from a battery power source."

Emphasis added.

Applicants submit that Wall, Oh, Macias, Hsiao, Ellsworth and Hood do not expressly or inherently describe each and every element of currently amended claim 1. Wall, Oh, Macias and Hsiao clearly do not include descriptions of the above emphasized elements of claim 1. This is implicitly admitted to in the Action since only Ellsworth and Hood are cited as anticipating elements that describe powering on or off elements of a cooling system. See Action, pages 3 and 4. Therefore Ellsworth and Hood will each be addressed in more detail in this response.

Ellsworth describes a hybrid cooling system that uses primarily air cooling and an auxiliary heat removal mechanism for times when air cooling is inadequate. See Col. 3, lines 44-48. The title of Ellsworth describes this cooling system as for a "Frame Level Partial Cooling Boost For Drawer And/Or Node Level Processors." Emphasis added. Also Figures 1 and 5 of Ellsworth depict rack or tower implementations of this cooling system. Applicants submit that these types of drawer, rack or tower implementations do not use battery power sources.

Therefore, Ellsworth fails to describe powering down a pump "in response to the mobile

computing device receiving power from a battery power source” as emphasized above for claim 1 and thus fails to support a *prima facie* 35 U.S.C. § 102(e) rejection of claim 1.

Hood describes a dual mode cooling system that has an active and a passive cooling mode. See Col. 2 lines 4-15. While in the passive mode, Hood describes the cooling system as basically in a power-saving mode. See Col. 2, lines 48-61. As part of the dual mode cooling system, Hood describes a liquid loop cooling system (33) that has two refrigerant lines, (12) and (42). See Fig. 3 and Col. 6, lines 32-42. According to Hood a pump (47) for line (42) is de-activated while the cooling system is in an active (power-hungry) mode and is activated while in a passive (power-saving) mode. See Col. 6, lines 57-65. The pump cited above for claim 1 “is powered off” in response to the mobile computing device receiving power from a battery power source.” Emphasis added. Applicants submit that this is a power saving step and Hood teaches away from doing this in that Hood describes activating the pump rather than powering off the pump when in a power saving mode. Therefore, Hood does not expressly or inherently describe each and every element of currently amended claim 1 and thus fails to support a *prima facie* 35 U.S.C. § 102(e) rejection of claim 1.

Since Wall, Oh, Macias, Hsiao, Ellsworth and Hood do not expressly or inherently describe each and every element of currently amended claim 1, Applicants request that the 35 U.S.C. 102 rejections of claim 1 be withdrawn. Also, currently amended claim 15 includes similar elements that comprises powering on a pump based on a source of power. Therefore Applicants request that the 35 U.S.C. 102 rejections of claim 15 be withdrawn. Further, claims 2-8, 16 and 18 depend on one of claims 1 and 15 and Applicants request that the 35 U.S.C. 102 rejections of these claims be withdrawn as well.

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**35 U.S.C. § 103(a) Rejections:**

Claims 18 and 19 have been canceled. Therefore this rejection is moot.

**Conclusion**

Applicants respectfully submit that claims 1-8, 15, 16 and 18 are in condition for allowance and such action is earnestly solicited. *The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.*

Please charge any shortages and credit any overcharges to our Deposit Account number 50-0221.

Respectfully submitted,  
Pokharna, et al.

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/Ted A. Crawford/Reg. No. 50,610/  
Ted A. Crawford, Reg. No. 50,610  
Patent Attorney for Assignee Intel Corporation

Intel Corporation  
PO Box 5326  
SC4-202  
Santa Clara, CA 95056-5326  
Tel. (503) 712.2799

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